

Residential Well Groundwater Sampling - Volatile Organic Compounds

April - May 1999

Precision National Plating Services - Clarks Summit, PA

Analyte (ug/l)	PA Statewide Health Standard	A 04/12/1999	B 04/15/1999	C 05/03/1999	D 05/06/1999	E 04/07/1999	F 04/07/1999	G 04/09/1999	H 04/08/1999	I 04/08/1999	J (1) 04/08/1999
Chloromethane	--	10 U									
Bromomethane	10	10 U									
Vinyl Chloride	2	10 U									
Chloroethane	28,000	10 U									
Methylene Chloride	5	10 U									
Acetone	3,700	10 U									
Carbon Disulfide	1,900	10 U									
1,1-Dichloroethene	7	10 U									
1,1-Dichloroethane	27	10 U									
total 1,2-Dichloroethene	(2)	10 U									
Chloroform	100	10 U									
1,2-Dichloroethane	5	10 U									
2-Butanone	--	10 U									
1,1,1-Trichloroethane	200	10 U									
Carbon Tetrachloride	5	10 U									
Bromodichloromethane	100	10 U									
1,2-Dichloropropane	5	10 U									
cis 1,3-Dichloropropene	--	10 U									
Trichloroethene	5	10 U									
Dibromochloromethane	100	10 U									
1,1,2-Trichloroethane	5	10 U									
Benzene	5	10 U									
trans 1,3-Dichloropropene	--	10 U									
Bromoform	--	10 U									
4-Methyl-2-Pentanone	--	10 U									
2-Hexanone	--	10 U									
Tetrachloroethene	5	10 U									
1,1,2,2-Tetrachloroethane	0.74	10 U									
Toluene	1,000	10 U									
Chlorobenzene	55	10 U									
Ethylbenzene	700	10 U									
Styrene	100	10 U									
Xylenes, Total	10,000	10 U									

Notes: All concentrations in ug/l (ppb)

(1) J was a blind duplicate of sample I. The I and J residences share the same well.

(2) Standards for cis-1,2-Dichloroethene and trans-1,2-Dichloroethene are 70 ug/L and 100 ug/L, respectively.

U = The analyte was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte sample.

UJ = The analyte was not detected above the reported sample quantitation or detection limit. However, the reported quantitation or detection limit is approximate and may or may not represent the actual limit of quantitation or detection necessary to accurately and precisely measure the analyte in the sample.

R = The sample results are rejected because of serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence or absence of the analyte cannot be verified.

Residential Well Groundwater Sampling - Semi-Volatile Organic Compounds

April - May 1999

Precision National Plating Services - Clarks Summit, PA

Analyte (ug/l)	PA Statewide Health Standard	G 04/09/1999	H 04/08/1999	I 04/08/1999	J (1) 04/08/1999	F 04/07/1999	E 04/07/1999	A 04/12/1999	D 05/06/1999	C 05/03/1999	B 04/15/1999
bis (2-Chloroethyl) ether	0.13	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Phenol	4,000	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2-Chlorophenol	40	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
1,3-Dichlorobenzene	600	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
1,4-Dichlorobenzene	75	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
1,2-Dichlorobenzene	600	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2,2'-oxybis (1-Chloropropane)	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2-Methylphenol	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Hexachloroethane	1	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
N-Nitroso-di-n-propylamine	0.094	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Methylphenol	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Nitrobenzene	18	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Isophorone	100	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2-Nitrophenol	2,300	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2,4-Dimethylphenol	730	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
bis (2-Chloroethoxy) methane	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2, 4-Dichlorophenol	20	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
1,2,4-Trichlorobenzene	70	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Naphthalene	20	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Chloroaniline	150	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Hexachlorobutadiene	1	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Chloro-3-methylphenol	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2-Methylnaphthalene	1,500	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Hexachlorocyclopentadiene	50	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2,4,6-Trichlorophenol	60	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2,4,5-Trichlorophenol	3,700	28 U	25 U	25 U	25 U	25 U	25 U	26 U	25 U	28 U	27 U
2-Chloronaphthalene	2,900	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2-Nitroaniline	2.1	28 U	25 U	25 U	25 U	25 U	26 U	25 U	28 U	27 U	25 U
Acenaphthylene	2,200	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Dimethylphthalate	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2,6-Dinitrotoluene	37	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Acenaphthene	2,200	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
3-Nitroaniline	2.1	28 U	25 U	25 U	25 U	25 U	26 U	25 UJ	28 U	27 U	25 UJ
2,4-Dinitrophenol	19	28 U	25 U	25 U	25 U	25 UJ	26 UJ	25 U	28 UJ	27 UJ	25 U
Dibenzofuran	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
2,4-Dinitrotoluene	2.1	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Nitrophenol	60	28 U	25 U	25 U	25 U	25 U	26 U	25 U	28 UJ	27 UJ	25 U
Fluorene	190	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Chlorophenyl-phenylether	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Diethylphthalate	5,000	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Nitroaniline	2.1	28 U	25 U	25 U	25 U	25 U	26 U	25 U	28 U	27 U	25 U
4,6-Dinitro-2-methylphenol	--	28 U	25 U	25 U	25 U	25 U	26 U	25 U	28 UJ	27 UJ	25 U
n-Nitrosodiphenylamine	130	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
4-Bromophenyl-phenylether	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U

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Precision National Plating Services - Clarks Summit, PA

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Hexachlorobenzene	1	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Pentachlorophenol	1	28 U	25 U	25 U	25 U	25 UJ	26 UJ	25 U	28 U	27 U	25 U
Phenanthrene	1,200	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Anthracene	43	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Carbazole	--	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Di-n-butylphthalate	3,700	11 U	10 U	10 U	10 U	1 J	10 U	10 U	11 U	11 U	10 U
Fluoranthene	270	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Pyrene	13	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Butylbenzylphthalate	2,700	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
3,3'-Dichlorobenzidine	1.5	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Benzo (a) anthracene	0.9	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Chrysene	1.8	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
bis (2-Ethylhexyl) phthalate	6	11 U	10 U	10 U	10 U	2J	2J	10 U	11 U	11 U	10 U
Di-n-Octylphthalate	730	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Benzo (b) fluoranthene	0.9	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 UJ	11 UJ	10 U
Benzo (k) fluoranthene	0.55	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Benzo (a) pyrene	0.2	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Indeno (1,2,3-cd) pyrene	0.9	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Dibenz (a,h) anthracene	0.09	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Benzo (g,h,i) perylene	0.26	11 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U

Notes: All concentrations in ug/l (ppb)

(1) J was a blind duplicate of sample I. The I and J residences share the same well.

U = The analyte was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte sample.

UJ = The analyte was not detected above the reported sample quantitaion or detection limit. However, the reported quantitation or detection limit is approximate and may or may not represent the actual limit of quantitation or detection necessary to accurately and precisely measure the analyte in the sample.

R = The sample results are rejected because of serious deficiencies in the ability to analyze the sample and meet the quality control criteria. The presence or absence of the analyte cannot be verified.

Residential Well Groundwater Sampling - Pesticides/PCBs

April - May 1999

Precision National Plating Services - Clarks Summit, PA

Analyte (ug/l)	PA Statewide Health Standard	G 04/09/1999	H 04/08/1999	I 04/08/1999	J (1) 04/08/1999	E 04/07/1999	F 04/07/1999	A 04/12/1999	B 04/15/1999	D 05/06/1999	C 05/03/1999
alpha-BHC	0.1	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
beta-BHC	0.37	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
delta-BHC	11	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (Lindane)	0.2	0.06 U	0.05 R	0.05 R	0.05 R	0.05 U	0.05 U	0.05 U	0.05 U	0.05 R	0.05 R
Heptachlor	0.4	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Aldrin	0.0087	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor epoxide	0.2	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Endosulfan I	220	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	0.041	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	1.3	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	2	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	220	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	0.62	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	120	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	1.7	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	40	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Endrin ketone	--	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	--	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
alpha-Chlordane	(2)	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-Chlordane	(2)	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Toxaphene	3	5.7 U	5 U	5 U	5 U	5.4 U	5.4 U	5 U	5 U	5 U	5 U
Aroclor-1016	2.6	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
Aroclor-1221	1.3	2.3 U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 U	2 U	2 U
Aroclor-1232	1.3	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
Aroclor-1242	1.3	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
Aroclor-1248	0.37	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
Aroclor-1254	0.37	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
Aroclor-1260	0.25	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U

Notes: All concentrations in ug/l (ppb)

(1) J was a blind duplicate of sample I. The I and J residences share the same well.

(2) (2) - Standard for Chlordane is 2 ug/L

U = The analyte was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

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Residential Well Groundwater Sampling - Metals

April - May 1999

Precision National Plating Services - Clarks Summit, PA

Analyte (ug/l)	PA Statewide Health Standard	G 04/09/1999	H 04/08/1999	I 04/08/1999	J (1) 04/08/1999	E 04/07/1999	F 04/07/1999	A 04/12/1999	B 04/15/1999	D 05/06/1999	C 05/03/1999
Aluminum	200	29.2 U	1,480	162 J	109 J	94.2 U	32.0 U	19.1 J	57.7 J	20.9 J	10.2 UJ
Antimony	6	2.3 UJ	2.3 UJ	2.3 UJ	2.3 UJ	29.0 J	23.5 U	2.9 U	3.0 U	40.8 J	2.3 U
Arsenic	50	5.8 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.2 U	1.2 U	8.8 U
Barium	2,000	50.7 J	81.4 J	128 J	125 J	28.4 J	17.0 J	118 J	998	163 J	468 J
Beryllium	4	0.6 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Cadmium	5	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U
Calcium	--	40,300	35,000	52,400	51,300	50,800	40,300	41,800	43,800	49,000	54,600 J
Chromium	100 (2)	0.6 J	16.8	35	29.8	0.6 U	0.6 U	0.6 U	0.6 U	3,060	0.6 U
Cobalt	--	1.5 J	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Copper	1,000	6.2 J	4.0 J	16.1 J	15.1 J	8.5 J	20.7 J	14.7 J	18.0 J	1.4 U	1.6 J
Hexavalent Chromium	180	10 U	20	20	20	10 U	10 U	10 U	10 U	3,700	10.0 U
Iron	300	8,590	1,890	438	315	288 J	79.3 J	144 J	588 J	134	95.7 UJ
Lead	5	29.2	10.8 U	6.3 U	5.1 U	1.9 U	1.1 U	1.1 UJ	1.1 UJ	4.6 U	1.9 J
Magnesium	--	6,320 J	4,780 J	7,930	7,770	5,580	6,370	6,680	6,270	7260	7820 J
Manganese	50	360 J	127	22.1	21.1	7.5 J	9.2 J	14.5 J	122	65.6	53.2 J
Mercury	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	1.6 J	1.5 J	0.6 U	0.6 U	0.9 J	0.7 J	0.6 U	1.6 J	0.6 U	1.2 J
Potassium	--	1,290 J	1,880 J	1,760 J	1,750 J	1,220 J	888 J	1,390 J	4,940 J	1,500 J	4,580 J
Selenium	50	1.6 UJ	8.0 UJ	8.0 UJ	8.0 UJ	8.0 UJ	8.0 UJ	2.6 J	2.7 J	2.4 UJ	2.4 UJ
Silver	100	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	34.5	1.2 U
Sodium	--	8,280	35,400	34,700	34,300	20,700	8,090	8,840 J	29,800 J	14,400	17,400
Thallium	2	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 U	27 J
Vanadium	2.1	1.2 U	1.7 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Zinc	2,000	37.7 J	26.8	14.0 J	7.9 J	298 J	7.8 J J	7.1 UJ	38.3	130 J	15.3 J

Notes: All concentrations in ug/l (ppb)

(1) J was a blind duplicate of sample I. The I and J residences share the same well.

(2) 100 ug/L is the State-wide Health Standard for Chromium (III) and the Federal MCL for total Chromium in groundwater

U = The analyte was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

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